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EXAMINER

CHANKONG, DOHM

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Technology Center 2100

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/029,928
Filing Date: December 31, 2001
Appellant(s): DOHERTY, JAMES M.

Ramraj Soundararajan
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/16/2007 appealing from the Office action mailed 10/26/2006.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 6437692	Petite et al	10-2002
US 6314340	Mecham	11-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 29-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al. (U.S. Patent Number 6,437,692), hereinafter referred to as Petite, in view of Mecham et al. (U.S. Patent Number 6,314,340), hereinafter referred to as Mecham.

2. Petite disclosed a system for monitoring and controlling remote devices wherein the remote devices may be sensors that communicate wirelessly with a local gateway via

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transceivers. In an analogous art, Mecham disclosed an irrigation controller that collects and utilizes environmental data.

3. Concerning claims 29, 36, and 43, Petite did not explicitly state information accessed from a climatic information providing server. However, accessing information on such weather servers was well known in the art as evidenced by Mecham who discloses the use of weather station servers to provide climatic information. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Petite by adding the ability to utilize information accessed from a climatic information providing server as provided by Mecham. Here the combination satisfies the need for advanced monitoring and control system solutions in distributed systems. See Petite, column 2, lines 28-30.

4. Concerning claims 34 and 41, Petite did not explicitly state the use of an IEEE 802.11b wireless interface. Petite does however state a wireless interface between the residential device and the residential gateway. See column 2, lines 54-62. Also, the IEEE 802.11b standard for wireless communications was well known in the art at the time of the applicant's invention so it would be a clear extension of Petite's system to use this standard for his wireless communications since his system already includes a wireless interface. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Petite by adding the ability to use an IEEE 802.11b wireless interface.

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5. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a control server or an article of manufacture are rejected under the same rationale applied to the described claim.

6. Thereby, the combination of Petite and Mecham discloses:

- <Claims 29, 36, and 43>

A residential gateway that connects a Wide Area Network (WAN) to an in-home network (Petite, local gateway 210 and column 17, lines 35-42), said residential gateway connecting at least one residential device over said in-home network, the residential gateway: forwarding state information of said at least one residential device to a control server over said WAN (Petite, column 12, lines 24-40); forwarding economic setpoint information to said control server over said WAN (Petite, column 13, lines 19-30); receiving control parameters from said control server over said WAN (Petite, column 6, lines 15-30), said control parameters determined by the control server based on at least the following information: relevant control information accessed from one or more climatic information providing servers on said WAN (Mecham, column 1, lines 43-48), said forwarded state information of said at least one residential device (Petite, column 14, line 51 through column 15, line 1) and said forwarded economic setpoint information (Petite, column 13, lines 8-30), whereby said residential gateway controls said at least one residential device based on said received control parameters (Petite, column 13, lines 19-23).

- <Claims 30 and 37>

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A residential gateway that connects a Wide Area Network (WAN) to an in-home network, as per claim 29, wherein said at least one residential device is a home irrigation system (Petite, figure 8) comprising: an irrigation controller connected to said residential gateway (Petite, figure 8, item 814); and at least one sprinkler connected to said irrigation controller (Petite, figure 8, item 817).

- <Claims 31 and 38>

A residential gateway that connects a Wide Area Network (WAN) to an in-home network, as per claim 30, wherein a watering cycle constitutes said control parameters for said home irrigation system (Petite, column 13, lines 19-23).

- <Claims 32 and 39>

A residential gateway that connects a Wide Area Network (WAN) to an in-home network, as per claim 31, wherein said watering cycle is also determined based on said economic point information (Petite, column 13, lines 23-30).

- <Claims 33 and 40>

A residential gateway that connects a Wide Area Network (WAN) to an in-home network, as per claim 29, wherein said economic setpoint information is set to control amount of electricity or water used by said at least one residential device during a particular time period (Petite, column 13, lines 23-30).

- <Claims 34 and 41>

A residential gateway that connects a Wide Area Network (WAN) to an in-home network, as per claim 30, wherein said irrigation controller is connected to said

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residential gateway via an IEEE 802.11b wireless interface (obviousness as discussed above in paragraph 14).

- <Claims 35 and 42>

A residential gateway that connects a Wide Area Network (WAN) to an in-home network, as per claim 29, wherein said Wide Area Network is the Internet (Petite, WAN 230).

Since the combination of Petite and Mecham discloses all of the above limitations, claims 29-43 are rejected.

(10) Response to Argument

I. PETITE DISCLOSES ECONOMIC SETPOINT INFORMATION EXACTLY AS CONTEMPLATED BY APPELLANT.

Appellant argues that the Petite reference fails to disclose an “economic” parameter [appeal brief, pg. 9, ¶1]. Appellant further argues that Petite fails to disclose the use of “economic|financial parameters which would keep the cost of water|electricity usage of an irrigation system low” [appeal brief, pg. 9, ¶1] or “the use of economization of resources” [appeal brief, pgs.9-10]. Appellant’s argument should not be considered persuasive because Petite discloses economic setpoint information exactly as contemplated by appellant.

Appellant refers to some examples of economic setpoint information in the specification as including water usage and electric usage information for the irrigation system [specification, pg. 9, lines 8-11]. More tellingly, appellant’s claim 33 further describes that “economic setpoint information is set to control amount of electricity *or water used by at*

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least one residential device” (emphasis added) [claim 33]. Based on this description, Petite’s water schedule and water requirements are interpreted as economic setpoint information.

As noted by appellant, Petite clearly discloses the use of a client-directed water schedule and the client’s specified watering requirements [column 13 «lines 8-30»]. Petite’s water schedule and water requirements control the amount of water that is used by the irrigation system to water the area [col. 13, lines 19-23 : opening a water valve per the water schedule]. Therefore, Petite’s water schedule meets the definition of economic setpoint information because the schedule is used to control the amount of water used by the irrigation system. This interpretation is consistent with Appellant’s specification and claims which describe setpoint information as “water usage” and for controlling the amount of water used by the device.

Furthermore, while appellant discusses functionality such as “economic/financial” parameters or keeping the costs of irrigation system low, it should be noted that none of these features relating to finances or costs are in the claim. Even if the claims could be construed to include these features, such economization functionality would have been obvious to one of ordinary skill in the art.

Petite describes that utility meter monitoring and client billing are representative of a monitoring system employed by utility providers [column 1, lines 60-62]. The use of a water schedule or watering requirements is clearly related to economizing the use of water. Furthermore, one of ordinary skill in the art would have reasonably inferred that the relation between a client watering schedule and the client’s water bill; the more water specified in the schedule, the higher the bill. Thus, a client’s ability to control the watering schedule

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implicitly gives the client the ability to control the cost of his water bill [see Petite, column 12, lines 24-40 : discussing the transmission of the utility meter usage to the utility company to calculate the utility bill].

II. MECHAM DISCLOSES DETERMINING CONTROL PARAMETERS BASED ON RELEVANT CONTROL INFORMATION ACCESSED FROM ONE OR MORE CLIMATIC INFORMATION PROVIDING SERVERS.

Appellant argues that Mecham fails to teach receiving climatic information from one or more climatic information providing servers [appeal brief, pg. 11, ¶1]. Appellant also argues that Mecham teaches away from receiving climatic information from a server. [appeal brief, pg. 11, ¶1]. Appellant's arguments should not be viewed as persuasive for the following reasons.

Mecham does not teach away from receiving climatic information from a server. Appellant refers to Mecham's teaching of the "Hargreaves equation" in support of this argument [appeal brief, pg. 11, ¶1]. It should be noted however that Mecham clearly criticizes previous systems that used the Hargreaves equation as being "noticeably inaccurate"; therefore, Mecham proposed a system that will implement the Hargreaves equation in a new way [column 3, lines 12-23].

Mecham's proposed system implements dispersed climatic information providing servers on the network [column 4, lines 1-6]. Mecham's control server accesses climatic information from the evapotranspiration modules and uses the information to control the irrigation schedule [column 9, lines 49-58]. Mecham's evapotranspiration modules read on the claimed climatic information providing servers as the modules reside on servers and provide the climatic information.

For example, the modules provide relevant control information such as temperature data and evapotranspiration values to the control server [column 16, lines 52-57». Appellant discloses climatic information as including temperature or evapotranspiration values [specification, 14-16]. Mecham's modules are connected to the control server over a network [Figure 5]. Thus, Mecham's evapotranspiration module read on to the claimed climatic information providing servers.

III. THE COMBINATION OF PETITE AND MECHAM IS BASED ONLY ON KNOWLEDGE WHICH WAS WITHIN THE LEVEL OF ORDINARY SKILL AT THE TIME THE CLAIMED INVENTION WAS MADE.

Appellant also argues that examiner's analysis is based on hindsight reasoning and has failed to point out how Petite's control server determines control parameters based on information from climatic information providing servers, state information and economic setpoint information. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Here, Petite disclosed a control sever that determined control parameters from state information and economic setpoint information but not information from climactic information providing servers. Mecham improves upon Petite's irrigation system by providing a system with distributed climatic information providing servers that returned temperature and evapotranspiration information to a control server. This information

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improves upon Petite's irrigation system because it improves the efficiency for watering the specific site [see Mecham, column 6, lines 50-56]. Thus, one of ordinary skill in the art would have been motivated to modify Petite to incorporate Mecham's teachings. Such a reconstruction is not based on hindsight reasoning but based on Petite and Mecham's teachings and the available knowledge to one of ordinary skill in the art.

(II) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

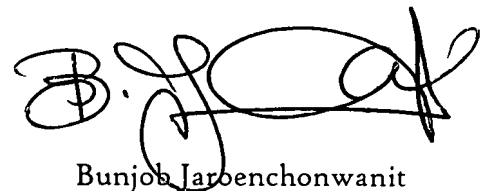
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September 18, 2007

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